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ORIGINAL DEPARTMENT.

LECTURE.

THE CONSERVATION AND CORRELATION OF VITAL FORCE.

Extract from a lecture delivered by J. T. ROTHROCK, M. D., Professor of Botany in the University of Pennsylvania.

REPORTED BY C. C. VANDERBECK, M. D.

Professor Rothrock, at the latter part of one of his most excellent lectures on Botany, thus spoke:—

It is but lately that physicists have proven, to the satisfaction of other men equally learned, that there does exist a series of compensations in the forces of nature; and that heat, light, motion, and other powers more or less unknown, not only may be converted, the one into the other, but that their exact equivalents may be stated in infallible mathematics. This had been dimly foreshadowed long ago, but its final proving belongs to our day. Vital force, however, from its very essence, is more intractable, and overrides mathematical restrictions, willing (so far as we can now see) to acknowledge similar relations of the most general character only.

There is no denying that the most sublime mental endowments may in the same individual be associated with the most hopelessly ridiculous, and we are hence prepared to accept as true, or at least as not improbable, that the "greatest, wisest" of mankind could also be the "meanest." Indeed, second thoughts may convince us that surpassing intelligence in one direction, implying unbroken devotion to a given line of study, almost of necessity entails

a corresponding ignorance in other lines of mental activity for which no leisure hours can be found.

But whilst we are foiled in any attempt at estimating the exact amount of vital or purely mental force in excess, in one direction, which it will require to compensate for a deficiency in some other, we may, nevertheless, with some degree of certainty, affirm that such relations do exist.

Geoffroy Saint-Hilaire not only recognizes the existence of this principle of compensation, but has drawn largely upon it in his teratological studies.

De Candolle, after granting the relation between excessive growth and atrophy, states that it is often exceedingly difficult to decide whether the former determines the latter, or the converse.*

It is, then, with no claim to originality that this is written, but rather to call for the more general recognition of a law already noted by the more observing ones. We may be unable to explain it, or, what is still more damaging to its chances of acceptance, be unable to show how it is to chime in directly with any form of evolution; for to this we have all now come; still it remains a law, as active as any other, even though it be less sharply defined.

If called upon to express what I believe concerning it, I would say: that all organic things, plants or animals, have a certain proportionate amount of developing force, actual or predestined, and that this synergy is under the direction of inherited tendencies; which being at times misdirected, one organ or set of

* De Candolle, *Theor. elem.*, ed. 1, § 73.

organs may take on excessive growth. Should this occur, there will be a corresponding atrophy in some other organ or set of organs. Now, against this statement of what I conceive to be underlying all growth, many instances can be adduced. Still the facts in its favor, when fairly marshaled, seem to me so preponderating as to make them more than mere coincidences.

The scope of this paper allows me to cite but a few out of the many instances I could give. Among plants, take as an illustration *Larrea Mexicana* Moric., the creosote plant of the southwest. It is a representative of the bean-caper family. Inside the base of each filament (which is filiform) is a large two-cleft scale, conspicuous enough to attract attention. It is not unusual to find filaments whose bases are not filiform, but are broadly expanded. *Erodium Texanum* Gray is a capital example of this. Besides, this same plant has an outer circle of five stamens which are minus their anthers, a fact which I might turn to account in my argument did space permit.

Now, morphology would settle the question concerning the essential nature of the scales of *Larrea*, by saying that they are the homological equivalents of the stipules we usually find on the right and left sides of the petioles of leaves, and more or less intimately united with them, only in this case, instead of being lateral they are intra-petiole, *i. e.*, between the petiole and the axis of the plant, just as the stipules are occasionally found. To this explanation no exception can be taken, in so far as it goes. But the question still remains unanswered, why it is, when most plants have neither these scales nor the broad bases to their filaments, in the example I have just given, where a decided tendency to cell proliferation exists, this proliferation should manifest itself in one direction only, *i. e.*, either as scales or broad bases to the filaments, but not both in the same plant?

Gaura, again, furnishes an example of the scales associated with slender filaments; and many more like cases could be brought forward. After some examination I am now unable to find a distinct, unequivocal contradiction to the principle I have enunciated. I am not prepared to affirm some do not exist. Indeed, I should be surprised if they did not.

The typical anther of our conception is possessed of two cells. Sometimes, however, there is but one, which may often be explained by the

partition wall being obliterated, and so causing the confluence of these usually separate cells. In *Salvia* (sage), however, there is but one cell where two might certainly have been expected. One has gone, entirely, or at most a mere knob of cellular tissue may remain to suggest the missing cell. Interposed between the perfect and the imperfect cells is a connective, unduly elongated, which from its very length and association with the separated halves of the anther serves to explain the want of development in the one. In other words, the connective is vigorous and lusty, at the expense of the impoverished cell.

Or take that illustration, almost too familiar to be alluded to here, the transformation of the stamens of the wild rose into the petals of the cultivated. It is a simple change of direction given to vital force, but, in so far as I can see, is no superadded power of development. Cultivation may turn the energies of the savage into a new channel, perhaps a higher one in some respects, but it does not follow that it is therefore, because higher in this sense, any indication of greater vitality or force of development. It is simply evidence of a transfer of power, and nothing more.

I have now in my possession an ear of Indian corn on which the grains have failed to develop, the chaff surrounding the grains being on the other hand enormously overgrown. If this instance stood alone I should be willing to admit that the failure of the grains to grow simply allowed room for their envelope to take on so unusual a size. I could, however, were I disposed, cite a long list of cases in which so mechanical an explanation would fail. I will quote a few, freely translated from Moquin-Tandon.

"M. Duval has observed flowers of *verbascum*, in which the filaments of the stamens took on an unusual growth, and at the same time lost the usual hairs."* "In certain excessive developments of the parts of the vegetable the hairs abort incompletely, or entirely."† Mr. Joseph de Caffarelli has given to me a somewhat dwarfed branch of bitter-sweet, which is covered with an enormous number of small hairs."‡ "In *Phleum Boehmeri* the inferior part of the flower is dilated sometimes beyond measure; the edges then are soldered together

* *Téatologie Végétale*, p. 63.

† *Idem*, pp. 62 and 63.

‡ *Idem*, p. 68.

at the base; at the same time the superior palet, and the pedicel of the rudimentary flower, abort entirely."*

"I have observed a monstrosity of *Faba vulgaris*, the stipules of which had taken on an enormous increase; they were changed into oval, foliaceous limbs, half arrow-shaped and slightly sinuous; at the same time the limbs of the ordinary leaves had disappeared entirely."†

"In a monstrosity of *Muscari comosum*, all the flowers had aborted; at the same time the peduncles had become longer."‡

"Lately there has been communicated to the Société d'Agriculture de la Haute-Garonne a spike of corn which presented a curious example of this last balance; all the flowers were found in a normal condition except one, of which the calicinal envelopes had taken on a growth almost double their natural size; the surface of this flower was covered with a thick coat of hairs, and its appearance resembled much that of a flower of the "folle avoine."§

"In some flowers the atrophy of the stamens coincides with the hypertrophy of the pistils. For example, in certain individuals of *Lychnis dioica* the male organs are found dilated, so that the pistils are represented by small, gland-like bodies; but in the other flowers the female organs are much developed, so that the stamens are reduced to simple rudiments; the same phenomenon occurs in *Spiræa Aruncus*, and in *Sedum Rhodiola*."|| In this last quotation we have plants associating themselves with such as our *Houstonia coerules* in which (belonging to hermaphrodite genera) there is a manifest tendency to assume that higher sexual organization where the individual shall be prepotently either male or female, as the one or the other set of organs takes on unusual growth. In other words, it seems to be a good illustration of the principle of vital compensation applied to function as well as to structure.

Mr. Thomas Meehan has furnished us a case directly in point in *Fragaria vesca* L. I quote him almost verbatim. "When it does not produce stolons, the number of flower spikes is increased, and, as they cannot run as stolons, they make up for this by continual axial production, bearing a succession of flowers through the whole season."

"Sometimes the runner party will so get the

upper hand that the pistils will be entirely suppressed, in which case the runners push out with so much enthusiasm as to crowd down and frequently destroy their floriferous neighbors. In fact, just in proportion as the plant becomes truly fruit bearing, and with a tendency to produce a succession of fruit on the same stock, is the tendency to produce runners checked." He then gives a modification of the above, but which is still a case in point.*

The same journal contains a description of a double early saxifrage with a small panicle, double flowers and no trace of either stamen or pistil.†

The animal kingdom would furnish us with still more striking illustrations. A fact I had long suspected concerning hydrocephalic children met lately with a most unexpected confirmation in the distinct, unequivocal testimony of one of the most distinguished living pathologists. "The process of enlargement in these cases is often one of simple growth, and that indeed to a less extent than it may seem at first sight; for it is very rarely that the due thickness of the skull is attained while its bones are engaged in the extension of their superficial area. Hence, the weight of a hydrocephalic skull is not much, if at all, greater than that of a healthy one; a large parietal bone, measuring nine inches diagonally, weighs only four ounces, while the weight of an ordinary parietal bone is about three ounces."‡

In his admirable text-book on "Diseases of Children," 2d edition, page 298, Dr. J. Lewis Smith, under head of "Anencephalic Children," writes:—"The vault of the cranium is absent. There is a deficiency of the frontal, parietal and occipital bones, except those portions which are near the base of the cranium. These portions are very thick and closely united, as if there were the usual amount of osseous substance, but instead of expanding into the arch, it had collected in an irregular mass at the base of the cranium."

Quoting again from the same author we are told:—"Hypertrophy of the brain is associated with rachitis, and stunted growth."§ Under rachitis, he informs us that, while in the first and second stages there is an arrest of ossification and a deficiency of calcareous salts in the

* *American Naturalist*, August, 1869, pp. 328 and 329.

† *Idem*, p. 327.

‡ *Surgical Pathology*, Paget, pp. 58 and 59. Third English edition.

Op. Cit., p. 34.

* *Tératologie Végétale*, p. 157. ‡ *Idem*, p. 153.

† *Idem*, p. 156.

‡ *Idem*, p. 158.

§ *Idem*, p. 156.

system, there is often in the third stage, as Lebert has stated, an exuberance of ossification and a superabundant deposit of the salts of lime, so that the reconstructed bone is stronger and firmer than the normal bone."*

Here, then, it would seem as though the compensation might extend over different intervals of time, one period being marked by a plus quantity, another by a minus:—a happy illustration of what John Hunter called the "body's memory." For this we are not entirely unprepared. The "stale" condition of overtrained pugilists is as much due, after all (some things lead us to suppose), to an excessive demand on their vitality as to subsequent dissipation; and the early break-down of so many of our best college gymnasts is but another fact in the same category. Overdraw your bank deposit at one time and you are left a debtor at another.

Failure of the long bones to properly develop in their longitudinal direction under certain conditions of disease is connected with undue thickening of the same bone.

Turning now to the domain of surgery proper:—it is probable that the vast majority of new growths will be found to occur in advanced age, or at least after the "prime of life." I exclude ovarian tumors, for manifest reasons.

So commonly do we find scirrhus tumors of the breast associated with declining years, that age is always made an element of the diagnosis. The testimony of Paget on this point is most explicit. His table of the frequency of cancer at the different periods of life is—

Under 10 years	5
Between 10 and 20 years	6.9
" 20 " 30 "	21
" 30 " 40 "	48.5
" 40 " 50 "	100
" 50 " 60 "	113
" 60 " 70 "	107
" 70 " 80 "	126†

thus showing that its frequency is more than twenty-five times as great between seventy and eighty as at ten years of age.

Does it not seem as though the still unused strength, lacking in these declining years a legitimate employment, were engaging in the development of a low grade of cells whose vitality was insufficient for their own stability? This, however, is but a poor hypothesis to account for a well proved fact.

* Surgical Pathology, Paget, pp. 98 and 99.

† Third English Edition, p. 798.

Be all this as it may, however, of this there is no doubt: that after the removal of an external, malignant growth, at an advanced stage of development, the chances of disease of the same character attacking an internal organ are greatly increased; hence prolongation of life is seldom gained by a surgical operation.*

Mr. John Simon gives an explanation of some of these facts I have derived from medical literature. I quote him, as they possibly may have a wider application. "But besides this antagonism effected through the general circulation, there probably are antagonisms of a local character; and parts which are respectively supplied by different contiguously rising branches of one arterial trunk seem specially able thus to antagonize each other. For, assuming the flow through an arterial trunk to remain the same, one branch, or set of branches, can only transmit more blood, if, simultaneously, another branch or set of branches transmit less; and we may well conceive it to be an important function of vasi motor nerves to provide for the adjustment of this antagonism, by establishing such inter-arterial sympathies that the relative opening of one branch shall determine the relative closure of another."† If not too mechanical and in contravention of vasi-motor function, I would venture to suggest that the relative closure of one branch might determine the opening of another, by forcing more blood through the latter. This would only account for those instances of the organic balance in which the plus and minus were in organs supplied from the same arterial trunk, *i. e.*, anatomical relatives. On the next page, however, the same author takes a more comprehensive view of his subject, and says:—"Textural excitability, perhaps, is not so exclusively local but that in this respect, also, these may be conditions of inter-textural balance; the total excitability of the body at any given moment being perhaps of fixed amount; so that, with regard to excitement, just as with regard to blood-supply, plus in one organ would imply minus in another."*

I am unable to say just what views were entertained on this subject by Geoffroy Saint-

* I am aware of the statistics of Velpeau regarding the removal of cancerous growths, but as they are so greatly at variance with the observation of the mass of surgeons, I do not regard them as invalidating my statements.

† Holmes' Surgery, 2d edition, Vol. I, p. 80.

* *Idem*, p. 81.

Hilaire, not having access to his writings. Milne Edwards gives the following clear statement of his own opinion. "The principle of connection of organs regulating the place occupied by each; a tendency to an organic balance, equipoise, or compensation when the development of an organ acts, as it were, injuriously upon others, as if the amount of vital force were restricted and limited."*

Finally, I quote the following at second hand from Meckel. It seems almost too strange to be true, but as the authority is above reproach we can only accept it as a fact. Let it be observed that here, however, "this antithesis extends over different children of one and the same mother. A girl had on each extremity a superfluous digit, and one hand of her sister wanted four, being the number of digits which her sister had in excess, reckoning the four extremities together."†

These are a few out of the immense mass of similar illustrations I might bring forward in support of my belief in an absolute law at the bottom of these correlations of structure, and may I not add, often of function?

There are many facts, on the other hand, which seem to militate against it. But it appears to me most likely that as we more thoroughly understand the principles of biology, in the same measure will our exceedingly vague ideas on this subject become more determined and absolute:—in fact, the evidence must, almost of necessity, like that in favor of the theory of gravitation, become of a cumulative character. Any other supposition would imply a belief in the ancient idea of a *lusus naturæ*, which is opposed to the most firmly grounded dogmas of modern science.

Any decided deductions in the way of distinct propositions concerning this law are as yet premature, but the following may find some support in the cases I have already given:—

1st. That organs anatomically or physiologically related tend to compensate among themselves for any aberration of structure or function.

2d. That an organ over-developed in one direction will be under-developed in some other: e. g., the case of the long bones already cited.

3d. That time may be an element in this

compensation: i. e., in rachitis deficient deposit of bony material may be followed later in the disease by an excessive deposit of it in the same bones.

4th. That the influence of this law may extend from one conception to another, as illustrated by the case related by Meckel.

NOTE.—These remarks are the substance of an article of Prof. Rothrock's, appearing several years ago in the *American Naturalist*.

COMMUNICATIONS.

JABORANDI AND ITS USES.

BY A. B. TADLOCK, M. D.,
Of Knoxville, Tennessee.

Read before the Knox County Section of the East Tennessee Medical Society, April 15th, 1877.

South America seems to be a land everlastingly growing medicinal agents—an herbarium naturalis medicinarum. *Pilocarpus* is a child of the Province of Ceara, Brazil, and Dr. Continho, of Pernambuco, the accoucheur d'enfant. Though of uncertain parentage for a long time, and christened *jaborandi* during its nursing, botanists have assigned the plant to the genus "*pilocarpus pernatifolius*," order, probably, "rutaceæ." *Jaborandi* is a Guarany-generic term; but with slight modifications in spelling and pronouncing, it is the common interlingualized term of several nationalities and Indo-American tribes in South America, "applied to various plants in the natural order of pipera-cæ, rutaceæ and scrofulaceæ."

This new medicine, favorably introduced to the medical profession of Paris in 1873, by Dr. Continho, has auspiciously stood the crucis experimentis hospitalis, attesting unmistakably high physiological principles, in its action upon both man and beasts. Not so, however, can we say of its specific therapeutical virtues; for, although very successfully used in, and highly recommended for, certain diseases, it is still in the green-room of criticism and investigation. However, the encouragement and the interest manifested at the centres of medical literature, invite, we think, a more general and familiar knowledge of the drug and its medicinal qualities than has been yet obtained among the profession, wherefore, we venture this brief résumé.

The results of the experiments with pilocar-

*Manual of Zoology. Translated by R. Knox, edited by Blake, edition 1863, p. 200.

†Cyclopædia of Anatomy and Physiology, Vol. IV, part 2d, p. 916.

pus are scattered throughout numerous journals, but the most elaborate history we get from the United States Sanitary and Medical Reports, Vols. III (Navy Dep't.), by F. V. Green, M.D., U. S. N., 1875. In this and also in several scientific and medical journals are mentioned the results of recent experiments with the drug on man and the lower animals. Besides, the writer gives his own experience with it in extenso, extracts from which we will take advantage of after noticing a few of his quoted authors. Rabuteau, he says, took an infusion of three grammes of the leaves, experiencing sweating and profuse salivation, which continued about three hours. Gubler experimented at the Hospital Beaujon, and reported powerful sudorific and sialagogue properties, with a very perceptible augmentation of the lachrymal secretion, also that of the nasal, bronchial and gastric membranes, with the latter congested and ecchymosed in dogs experimented upon. The English physicians, Ringer, Gould, and Murrell, confirmed the observations of the French as above given, and affirm that the pulse is increased in frequency, and that diarrhoea is not produced by the medicine. Further, Robin and Ringer differ as to the drug's thermometrical effects on the system, the former claiming a rise in the temperature, of from 1° to 2° ; the latter as positively states a falling of 0.9° , lasting $1\frac{1}{2}$ to $4\frac{1}{2}$ hours. Ringer also noticed a disturbed vision, and on applying a glycerized extract to the eye produced pupillary contraction. Robin found that pilocarpal salivation was completely arrested by atropia, whose action is known to contract the arterioles, wherefore he theorized that the new drug paralyzed the vaso-motor nerves, and produced temporary dilatation of the arterial system. "Sphygmographic tracings showed complete asystolia during the sweating stage, from which fact Robin infers that jaborandi acts by paralysis of the vaso-motor nerves," and Rochefontaine likens its effects, in this particular, to the operation of curare, with the difference that the paralyzing effects of the latter are preceded by a temporary spasmodic contraction of the vaso-motor nerves, which seems entirely wanting in the former.

Vulpeau, Ringer, and Robin, all concurred in the antagonistic effects of the two mentioned drugs, not only in salival exhibition, but in all the other features related, including that of the mammary secretion. A lad who "had taken a

grain of the alkaloid," in the University Hospital, was restored in fifteen minutes by the administration of "thirty grains of jaborandi."

Dr. Greene furnishes a detailed account of nine patients on whom he used the fluid extract: 2 with syphilitic rheumatism; 3 with chronic rheumatism; 1 with pneumonia; 1 with subacute rheumatism; 1 with orchitis and incipient bronchitis; and 1 with syphilis consecutiva; and concludes as follows:—"The above, with the addition of the trial of the effects on two healthy adults, in whom drachm doses produced the expected results, but without any points deserving special mention, although not presenting a formidable array of experiments, still show such certainty and uniformity of action, that it must be conceded that jaborandi possesses the properties claimed for it by Dr. Continho, namely, those of a powerful yet safe sialagogue and sudorific. "In the main features, my observations," says he, "of the effects of the drug coincide very closely with those already recorded. In no case has either perspiration or salivation been wanting, although they have varied considerably in quantity. In several cases the salivation amounted to twenty fluid ounces, and in no case did it fall below six ounces. The perspiration was profuse in the great majority of cases, and in the remainder was quite free. The pulse invariably rose during the action of the medicine. The temperature followed the same rule, except in one case, namely, in that of the patient with subacute rheumatism, when there was a lowering during the height of the action. This fall was accompanied with considerable pallor, nausea, and hiccough, that persisted until the effects of the medicine passed off. As the action decreased, the temperature returned to the point noted before the administration. As confirmatory of the observations of Robin, with which mine agree, it may be well to state that Rabuteau, in his own case, found the temperature highest when the medicine was acting most powerfully; that Ambrosoli also records a rise of some tenths of a degree, and that Riegel likewise acknowledges a primary increase in this respect. Diarrhoea did not occur in a single case. Increased secretion was not remarked in a single case, from the nasal mucous membrane, and augmentation of the lachrymal in only two or three. Pallor was not remarked in the great majority, while the resulting depression was invariably slight."

It is reported by the same writer that Gubler and Robin used the medicine in articular rheumatism and bronchitis with emphysema, with amelioration of symptoms and "drying up of the profuse mucous secretion;" and that "in Bright's disease the oedema rapidly disappeared, but soon returned." Also, that Dr. Feriol treated with it eight cases in the *Maison Principale de Santé*; one, a case of syphilitic rheumatism, took fifteen doses, with improvement each dose, but on account of the "lowering" effects of the medicine, it was discontinued. Cardiac complications rendered it necessary to discontinue its use in the second case, one of acute rheumatism. With him failure attended its use in a case of gout, and seemed to aggravate one of neuralgia, and there was no appreciable effect observed in the other four. Dr. Feriol's experience was so at variance with others' views, it suggested the probable spuriousness of the article of pilocarpus used, and led to the discovery of unreliable preparations in the market.

Dr. Czernicki is reported to have obtained wonderful success with it in metastatic mumps. Savignac obtained all the effects by enemata and hypodermic injections. Lastly, Holmes designates the active principles (a volatile oil, an acid resin, and an alkaloid) pilocarpina, while Parodi christens the alkaloid jaborandina, of which Gerrard has obtained the chloride and nitrate, which produces the full therapeutic effect. Dr. Gerrard's report refers copiously to English, French, and German medical journals for information, and speaks specially of Carville's interesting report on the medicine to the Biological Society of Paris, and of valuable contributions on the same subject, by Langley, of St. John's College, Cambridge. Since Dr. Gerrard's report was made, December 1875, we glean the following from the press, which is important:—

Gerrard formed the nitrate and hydrochlorate of pilocarpin, half a grain of which produced the full effect of jaborandi in its other forms. Gubler reports further that six grammes of the bark as a dose is equal to four grammes of the leaves. Laycock, of Edinburgh, recommends jaborandi for "both kinds of diabetes," and "some forms of Bright's disease," on the ground that those "are really neuroses, having their seat in that part of the brain which regulates the amount of water in the blood, and has, therefore, anatomical and functional relations

with the sudoriferous glands and the kidneys, and with the appetite for water and sense of thirst," giving two cases, in which he shows wonderful success in the use of the remedy. Dr. Martindale takes an unusually large dose, and reports:—

"At 11.30 P. M., on retiring to rest, I swallowed fifty or sixty grains. In five minutes I felt a glow, an increased circulation, an uneasiness in the head, became restless, and the saliva began to flow. In fifteen minutes I was perspiring freely. Salivation and perspiration continued to be profuse, until my sight became blurred. At a distance of four feet I could see my wife, but could not distinguish her eyes. On this occurring, I became a little anxious, as I had taken an overdose * * * * near objects I could see distinctly enough. The pupils were slightly dilated, I was told. Pulse rose from 96 to 104. The depression was not great, but I began to shiver; had more cover and some spirits. The excessive perspiration continued from all parts of the body; the effects of the Turkish bath were nothing to it; the saliva, for a time, required almost constant ejection, and the cheeks had a kind of collapsed feeling. Speech was difficult and indistinct. At one o'clock was sick, and vomited some saliva I had swallowed. Night-shirt and arms were soaked and steaming with sweat. At 1.40 I fell asleep, and slept until 6, and woke with pulse at 88, 80 being normal.

H. C. Wood, M.D., author of "Therapeutics, Materia Medica and Toxicology," in prescribing the medicine, recommends "that when there is general high temperature and sthenic excitement the combination of jaborandi and an arterial sedative will probably be found useful."

[Dr. Craig, of Edinburgh, in a lecture, refers to an account of this medicine in a Brazilian dictionary, published by Dr. Chernovis, in 1868, which assigns the plant to the order piperaceæ, and mentions a tincture made of one part of the leaves to eight parts alcohol, which, when used, acted as a sialagogue. This suggests a doubt as to the right discoverer.]

But it is not essential, although interesting, that we should further pursue these reports, and the experience of others, all of whom seem to concur pretty uniformly in their statements that the drug has rare and very powerful medicinal properties, not possessed in an equal degree, by any known substance in our *materia medica*—that of a sialagogue and sudorific.

Impressed with the favorableness of the effects of the medicine, I, in December last, procured, through the house of Lyons and McCampbell, druggist of our city, two fluid ounces of the extract, and receiving such encouragement in its use, I had them to order another supply, of which they have filled several prescriptions for me.

In all I have prescribed it to eleven or twelve patients. First, a girl aged nine, with acute rheumatism, with oedema of extremities and the usual excessive pain on palpation and motion, and other symptoms common to such cases. No complications ascertained. Gave thirty drops of the fluid extract pilocarp, twice per day, which produced promptly the usual salivation and diaphoresis attributed to its therapeutic action. On the fourth day my patient sat up and could take a step or two by holding on to some support, swelling and pain having entirely disappeared. Without further treatment, she was out and enjoying usual health in a day or two. A case of muscular rheumatism, one of meningeal rheumatism, and then another of muscular rheumatism, and one of lumbago, all were treated with the fluid extract, with varying success. A case of enlarged prostate, with hemorrhoids, seemed to be greatly benefited at the first dose, and the patient continued its use thrice per day, until able to return to business. Three cases of incipient catarrh, or "bad colds" (sufficiently severe in attack to cause a resort to medical aid), were arrested and entirely broken up by a single dose each. In the other two or three cases, the physiological effects were all that was expected. And here we will close our report, having intentionally, for want of space, avoided detailed statements. Though the field is inviting, and the opportunity tempting for theoretical pursuit, I will conclude by observing that, therapeutically applied, the new remedy coincides in physiological action with the most acceptable in medical literature for the treatment of rheumatism by secretory stimulants, prominent among which are the sialagogues and sudorifics.

The secretants upon which these classes of medicines operate specially, being usual and efficient channels through which nature manifests her greatest efforts to throw off toxic matters, as evinced in the sweating of fevers, in sewage poison, in cholera and hydrophobia, in mercurialization and some stages of rheumatism, and many of the vegetable and mineral

poisons, their action justifies us in the belief that they may be made more subservient to the demands of the medical art, as mechanical agents, if nothing else, by the effect of substances which will more directly and greatly increase their action, in the way of eliminating foreign materials, expelling and correcting vicious secretions, and sometimes, with the aid of tonics, by harmonizing the digestive and assimilating processes, as, for example, in specific rheumatism, in water brash, or in acute serous effusions.

HOSPITAL REPORTS.

UNIVERSITY HOSPITAL.

LECTURES OF PROFESSOR WM. PEPPER.

REPORTED BY SAMUEL M. MILLER, M.D.

Incipient Phthisis.

The attack began in this case, that of a sailor, twenty-four years of age, with a slight, dry, hacking cough, some two years and a half ago. Six months after that date, when at work on shore, he had a severe hemorrhage, and lost a pint of blood. The hemorrhage was followed by fever and an increase of the cough, which, however, soon subsided, and he returned to his work. Six months later he had another hemorrhage larger than the first. Again the same improvement occurred, to be again followed, after another six months, by a third hemorrhage. One month ago he had a fourth hemorrhage, and later still he has had two or three slighter ones. *Throughout these two years and a half the mucous secretion has been scanty and the cough dry.* There has been but little loss of flesh. Epistaxis has occurred several times. The patient exhibits no cardiac, nor gastric symptoms. The pulse is 96 and the temperature normal, with the daily fluctuation of half a degree. There is thick, tenacious mucus on the posterior wall of the pharynx, the mucus membrane is congested and the tonsils enlarged. Physical examination shows a symmetrical, non-phthisical chest, with good expansion, though there is a little less motion at the left apex than at the right. There is no contraction and no increased vocal fremitus. Percussion is healthy on both sides, with the exception of a very slight elevation of pitch and a little less volume at the left apex. Auscultation shows a slightly weaker expiratory murmur, with prolongation of expiration at the left apex. There is evidently a disposition to hemorrhage from the mucous surface. It is impossible that such large hemorrhages as he has had should have come from the fauces or larynx. They may, however, have come from the bronchial mucous membrane, and have been due to acute congestion of the left apex.

The diagnosis must be considered finally, not only as regards the pre-existence of local lesions, but also as regards vital tendencies and the significance of such lesions. In this aspect we may conclude that our patient has a very slight degree of condensation of a portion of the left apex, due to repeated congestions, and some degree of subacute inflammatory action, but without true tubercular formation as yet. It is in just such cases as this that exact diagnosis is of vital importance, although it is attended with difficulties that are absent when the disease has advanced to the later and less curable stages.

There is no doubt that even large hemorrhages may occur from the mucous membrane of the bronchial tubes, without pre-existence of any disease of the lung tissue. In some cases, too, it appears that the occurrence of such a hemorrhage seems to excite an irritative process in the lungs, which, in subjects who are predisposed to phthisis, may result in chronic, destructive lung disease. In such instances, of course, the initial symptom would be the hemorrhage taking place, perhaps accidentally, in the midst of ordinary health. That there is needed a constitutional or local predisposition to disease, in addition to the hemorrhage, may be learned from the numerous cases where even large and repeated hemorrhages occur without the supervention of phthisis. Thus I believe that the importance of hemorrhage as a cause of phthisis is much exaggerated by a certain class of pathologists. On the other hand, with the existence of even a very small amount of lung disease, hemorrhages are very apt to occur, probably as the result of severe congestion. Thus, in the present case, it is for us to consider whether there has been a small amount of subacute local disease all along, and that the hemorrhages have occurred from temporary broncho-pulmonary hemorrhages, or whether the hemorrhage was its first phenomenon, and the local disease was induced by it, and has been increased by each subsequent hemorrhage. In view of the history of dry cough, preceding the first hemorrhage for six months, and of the rapid return to the previous condition which followed each hemorrhage, I am inclined to take the former view. In like manner, cough deserves careful study, as an early symptom of phthisis, although, owing to the frequency with which chronic cough is due to fancied laryngeal or bronchial irritation, much care is needed to determine its true significance. The cough in incipient phthisis is usually short, hacking and painful, and is at first dry, and continues thus without expectoration, for a variable time, weeks or even months. Expectoration, when it begins, is apt to be at first of glairy mucus, later of whitish and thicker mucus, and then of whitish, yellow, muco-purulent matter. True, solid, purulent sputa rather belong to a later stage. These symptoms we have thus alluded to, and even the detection of physical signs of slight localized change at one apex, can only

have their true value given them, when viewed in connection with the general constitutional symptoms. In the present case, both the local and general symptoms are exceedingly slight.

The local signs are usually found at the upper part of one lung. They depend on the development of little centres of disease—tubercles, a peculiar type of lymphoid tissue—growing from either the connective tissue elements or the alveolar epithelium of the minute bronchioles. Each tubercle cuts off partially the supply of air from a colony of air vesicles, and thus impairs expansion. On auscultation this same cutting off of air makes the inspiration feeble. The inspiration may be not only weak, but also jerky. The air has the same difficulty in getting out, so expiration is more prolonged. Percussion ought to show less resonance over the affected spot, but this frequently amounts only to a slight elevation of pitch and loss of volume, which, when at the left apex, as in this case, are with difficulty appreciated, on account of the light natural difference between the right and left apex.

Among general constitutional symptoms which afford means of diagnosis may be mentioned loss of flesh, debility, increase in rapidity of pulse, and elevation of temperature. Marked general emaciation always means that something serious is the matter. It may be the result of impaired digestion, but if the patient eats heartily and still loses flesh, there is something vitally wrong going on. If flesh keeps up, even when other decided symptoms show themselves, there is more reason to hope that the local lesion may not be of truly tubercular nature. Loss of muscular strength, unless it be very marked, is not so important as a symptom, as loss of weight, for muscular weakness may come on from temporary causes. Getting out of breath easily may be merely a symptom of debility, or a symptom of organic lung trouble. Rapidity of pulse is exceedingly valuable as a rational sign. The normal pulse is 72, but it may vary from 54 to 86 with perfect health. Persistent and sustained increase in pulse rate, however, without cardiac disease, is apt to indicate serious constitutional irritation due to some local lesion. Elevation of temperature always means increased tissue change. It may, in the earliest stage, not be greater than half a degree. There is no more important symptom than this last, and it usually sets in long before the physical signs become evident. Temperature differs much in different people with the same amount of lung disease. We must, therefore, always take into consideration the individual idiosyncrasies of the case under treatment, before reaching a final conclusion.

The treatment of such cases as the one now under consideration, where there is slight impairment of one apex, and an accompanying liability to chronic, but not tubercular, phthisis, may be entered into, and carried on, with great hopes of permanent cure. Among the most important hygienic measures, are good food,

healthful out-door exercise which will expand fully the chest, and an equable climate, such as may be found in the south of California, New Mexico, or the southern and western slopes of Colorado. Sea voyages, such as a cruise to some tropical ocean, and not sailing about in some inclement climate, as many consider the term to mean, are often most plainly beneficial. If these ways of regaining lost health be out of the question, and the patient be compelled to stay at home, inhalation of compressed air may be tried with success; counter-irritation may be applied over the seat of disease, and cod liver oil, the syrup of the iodide of iron, arsenic, and the hypophosphites of lime, soda and iron administered internally.

Tubercular Laryngitis.

The patient, a man of thirty-two years, has suffered for eleven months with cough and increasing weakness. There seems to be no hereditary tendency. The sputa were at first white and frothy, but are now yellowish and muco purulent, and occasionally tinged with blood. There has been some night sweating, but no hæmoptysis. From time to time the man has coughed up gritty, calcareous matters, about half the size of a pea. This calcareous deposit is the inorganic remnant of little spots of cheesy pneumonia, the organic parts of which have become softened and absorbed. This symptom is on the whole favorable, showing that the morbid process has been slow, with a tendency to localization. The man's voice began to be harsh five months ago; it is now reduced to a mere hoarse whisper. He suffers from great difficulty in swallowing, and the attempt to take liquids is apt to cause strangling, from the entrance of the fluid into the larynx. The disease affects the epiglottis, vocal chords, and follicles below. The ulceration starts from the follicles of the mucous membrane, which may be the seat of true tubercular disease, or may simply become hypertrophied and burst. There are the usual symptoms of swelling, redness, and oedema in the throat. The swelling partly closes the entrance to the larynx, so that air cannot easily enter the lungs. The patient has had attacks of congestion with increased swelling, from time to time, thus accounting for the alternation in the severity of the symptoms. The left apex is healthy, the resonance of the right apex is fair, but has a higher pitch. Auscultation gives moist crackling and gurgling râles over the right apex.

When phthisis begins in the larynx, as in this case, the symptoms are generally a laryngeal cough and more or less serious lesions of the larynx. The patient fails in health, and loses his strength and voice. The larynx may, however, be implicated after the lungs, though there need not be, of necessity, a deposit of tubercles in it. When laryngitis comes on first it may greatly complicate the recognition of slight development of lung trouble, masking,

as it does, the physical signs. In such cases we must rely mainly upon percussion and palpation, and the possibility of catching a quiet breath in the pauses of the usual snoring respirations. When laryngitis comes on late the voice gradually grows feeble, sometimes reduced to a mere whispering effort, the cough becomes laryngeal, and even swallowing produces irritation.

The general treatment of such cases is the same as that for phthisis. Locally, pure nitric acid, or strong solutions of nitrate of silver, may be applied to the ulcers. Extreme care must, of course, be had in making these strong applications, and a delicate brush holding the caustic guided carefully to its destination by the aid of the laryngoscope. For the oedema, astringent solutions, such as sulphate of zinc, copper or alum, may be recommended. Gargles and inhalations can be used for the cough. The following formula will be found of value:

R. Tinct. benzoini comp.,	f. ʒij
Glycerinæ,	f. ʒss
Aquæ	q. s. ad., f. ʒiv. M.

Sig.—To be used as a gargle.

Inhalations of steam, vapor of hops, or conium, are sometimes successful as palliatives. Counter-irritation may be applied externally to the larynx, in the shape of small blisters. To relieve the sense of fullness, lozenges of krameria, hæmatoxylon, or tannic acid, are prescribed. In desperate cases tracheotomy might be performed, and a metal tube worn, thus putting the much worn larynx to rest. It is needless to say that such cases as the above are most intractable, and that the prognosis is always grave.

Mitral and Tricuspid Regurgitation.

The patient, a girl of 20 years, had rheumatism some time ago, and has lately been suffering from increasing cardiac difficulties. When admitted to the wards she exhibited the most extreme symptoms, viz., congestion of the lungs and liver and general anasarca. She also had marked jaundice, and great dyspnoea, and shortness of breath. The area of cardiac dullness was much increased. When brought before the class her condition had been vastly improved by a restricted diet and the use of mercurials.

In such general obstruction of the circulation, the main indications are to sustain the tone of the system, and to lessen the mass of blood. In mild cases, abstinence from blood-making food, and a diet of a couple of pints of skimmed milk, daily, will often act advantageously in a short time. If depletives are needed, the best of them is mercury, three to four grains of blue mass, followed in six hours by a saline. The mild mineral waters are also useful; in desperate cases nothing will act as rapidly and as effectively as opening a vein in the arm, or drawing from eight to ten ounces of blood, by wet cups, from the back.

Catarrhal Jaundice.

This man, a weaver by trade, has been much exposed, of late years, to extremes of heat and cold. Some time ago he had a severe attack of indigestion, with flatulence, general weakness, and a feeling of weight in his stomach. Since that time he has suffered from attacks of jaundice, coming on every six weeks or so, and lasting from four to five days at a time. Lately, they have occurred at intervals of ten days. His face and the whites of his eyes are very yellow, and the whole of his body is more or less tinged. In the region of the gall bladder there is some resistance and impairment of resonance upon percussion, but no enlargement and no tumor to be found. From the history of the case, the jaundice has evidently been the secondary result of inflammation of the mucous membrane of the stomach and duodenum, which, in course of time, involved the bile duct, and brought on obstruction by inflammation and swelling of its lining membrane.

Jaundice is produced by various causes. (1) obstruction may be caused by swelling of the lining membrane of one of the ducts, either the bile duct, or ductus communis; or (2) it may be brought on by the pressure of a neighboring enlarged gland, or tumor upon the ducts; or (3) it may be the result of the passage of a gall stone.

The first symptom is the coloration of the skin, the whites of the eyes, the face, and those parts of the body where the circulation is most rapid and the skin softest, which become yellow, or, where the case is very aggravated, olive green. The bile is turned from its proper channel and reabsorbed into the blood. The other symptoms are the clayish, whitish, or grayish color of the faeces, the yellow sweat which stains the clothes, and the brownish yellow urine. There is generally obstinate constipation, and possibly dyspeptic symptoms arise. There are two kinds of jaundice, that from obstruction, as in the present case, and jaundice from suppression. In the latter variety, in which the elements of the bile are not removed from the blood, the symptoms are those of nervous and nutritive disturbance. The diagnosis between the three varieties of jaundice from obstruction, noted above, is made generally without difficulty. Where the obstruction is produced by the passage of a gall stone, the attack is generally very acute and terrible—like an acute attack of colic—and attended with severe nausea and vomiting. The patient goes to sleep after the attack and wakes up yellow. Percussion and inspection will generally reveal the presence of a tumor or enlarged gland which presses upon the ducts. In the case under consideration the nature of the cause is distinctly revealed by the symptoms which indicate the inflammatory origin of the disease. A peculiar symptom frequently noticed is the intense itching produced by the circulation of the bile acids in the flesh.

In the treatment of this case we must first allay the irritation of the mucous membrane of

the stomach and duodenum, and not begin by acting on the liver with cholagogues and mineral acids. All exposure must be avoided. A tumblerful of some one of the alkaline mineral waters should be taken twice daily, and nitrate of silver with small doses of the extract of belladonna given in pill form. Belladonna prevents spasmodic contraction of the ducts. Where there is much local irritation, blisters may be applied over the gall duct and gall bladder.

MEDICAL SOCIETIES.**NEW YORK PATHOLOGICAL SOCIETY.**

Stated meeting, April 11th, 1877. Dr. E. G. Janeway, president, in the chair.

Loose Cartilage Removed from Knee-joint.

Dr. Bull presented a specimen of loose cartilage removed by operation at the New York hospital, from the knee of a man aged twenty. An incision three quarters of an inch in length was made, and the cartilage was then extracted through it. The edges of the wound were brought together by means of carbolized catgut ligature, and healed by first intention.

Urethral Calculi.

Dr. Erskine Mason presented two urethral calculi, which he had removed from a patient at Roosevelt Hospital. The patient was thirty-one, and had been operated upon by Dr. Eager, four years ago, for stricture of the urethra. Two years ago he had been a patient in Roosevelt hospital, and though he had several strictures he absolutely refused to be operated upon. On November 17th, 1876, he reentered Roosevelt Hospital; he was suffering from phthisis, and several perineal fistulae were visible. On December 5th, while passing a sound into the urethra, Dr. Mason had detected the presence of a calculus at the peno-scrotal junction. An attempt was made to extract it by first dilating the urethra, but this failed, and perineal section was resorted to, the strictures having been divided at the same time. Two calculi were removed; one weighed three grains, and the other measured one inch in length, and weighed one scruple.

Cystic Degeneration of Kidney in a Centenarian.

Dr. A. H. Smith presented specimens, with a history, as follows:—

A man, aged one hundred and eleven years and twenty-five days, had enjoyed good health, until within a short period of his present illness. He had become addicted to the use of opium, long ago, which caused him to suffer from constipation. He gradually diminished the amount of opium he took to a four-grain pill at bedtime. One day last January he was attacked with severe dyspnoea, after exposure, which lasted for forty-eight hours; this proved to be an attack of pulmonary congestion.

He rallied, but it left him in a feeble condition. Fifteen days before he died, his right thigh became enlarged, but the swelling was not inflammatory. It occurred over the seat of an old fracture of the femur, which the patient had sustained when he was ninety, and was apparently the source of a cold abscess, as evidenced by fluctuation. A consultation was held, and it was decided not to operate, unless some constitutional manifestations should arise from it. The swelling increased in size, and was aspirated at three different periods. He gradually sank, and died of asthenia on April 3d. During the patient's illness an abdominal tumor could be felt, extending midway between the ribs and crest of the ilium, on the right side; it was not painful on pressure.

Autopsy.—On opening the abdomen a growth was found extending from the umbilicus to the right, and downward. It was the size of a child's head, and was covered by the peritoneum. The growth was composed of cysts, both of which contained a substance resembling hashed liver. The larger one contained about three pounds of this substance. On further examination it was found that this tumor represented the right kidney, that organ being absent. A cord was found adherent to the spinal column opposite the second lumbar vertebra. Above the large tumor was a smaller one, which was thought to represent the suprarenal capsule. Below the larger growth another cyst was found, which was partly solid and partly liquid.

On examining the right thigh, three cysts were found at the seat of the abscess, situated immediately beneath the vastus externus muscle. Two of them were more or less broken down, while the other was complete. Their contents were similar to those of the abdominal cysts. The breaking down of the walls of these cysts was evidently the cause of the abscess. The left kidney was contracted, and cysts were seen upon its surface. The capsule was not adherent. The cortical portion had almost entirely disappeared, and what remained of it contained numerous cysts. The patient had exhibited no evidences of renal disease. The liver was small and fatty, the right lobe containing a small cyst filled with a clear fluid.

The heart was fatty and the aortic valves calcareous. The arch of the aorta was distended, and calcareous patches were visible upon its inner surface. The lungs were in a normal condition.

Pseudo-Leucæmia.

Dr. Delafield presented a specimen, in behalf of a candidate, with a history, as follows:—

A man, aged 43, a laborer by occupation; had always enjoyed good health. In his youth he had been devoted to athletic sports. He had never contracted venereal disease. During March, 1876, he first complained of pain in the lumbar region; five months later he noticed that his abdomen was swelling. On August 1st he entered Roosevelt Hospital. A tumor,

the size of a hen's egg, was seen in the umbilical region, which, subsequently, slowly increased in size.

On October 14th the patient left the hospital. He re-entered shortly afterward, and it was found that the swelling had increased in size, and was painful. The patient had lost his appetite, and was very much emaciated. The urine was tested, and found normal. During December this patient had intestinal discharges of blood and mucus.

On February 19th, 1877, his legs became cedematous. Albumen and hyaline casts were now found in the urine. Death occurred on March 22d.

Autopsy.—Body greatly emaciated. On opening the abdomen a tumor was found occupying the right iliac region; it was situated behind the peritoneum, and was coated with pus. It was attached to the four lower lumbar vertebrae, to the under surface of the duodenum, and to the rectum below. There were no changes in the intestines or bladder. The tumor had been developed from a number of glands situated behind the peritoneum.

Dr. Delafield presented another specimen of a similar nature. This patient was an Italian, aged thirty-five, who had been under the care of Dr. Erskine Mason, at Roosevelt Hospital. He was admitted to the hospital on September 7th, 1876. He was very anæmic, and had several enlarged glands about his neck. On the 24th they were found to have increased in size. On October 12th he complained of pain in the left leg, with loss of power. On measurement it was found to be smaller than the right leg. On December 6th the blood was examined, and found to be normal. On March 26th diarrhoea set in, and he died on April 8th.

Autopsy.—Brain not examined. Numerous enlarged lymphatic glands were found about the neck, and surrounding the trachea, but not compressing it. These tumors extended to the infra-clavicular region. No enlarged glands were found within the thorax. The liver was enlarged and waxy, the spleen small and waxy, and the kidneys normal. The stomach was the seat of catarrhal inflammation. There were superficial ulcers upon the mucous membrane of the rectum. The mesenteric glands and Peyer's patches were enlarged. The inguinal glands, and the cervical and axillary glands were enlarged on the left side. On microscopical examination of the medulla oblongata, an increase of stellate and fusiform connective tissue cells was discovered. These cases seem to be pseudo leucæmia.

Pott's Disease.—Death Resulting from Cerebro-Spinal Meningitis.

Dr. Satterthwaite presented a specimen of caries of the lumbar vertebrae. A man, aged thirty-four, was admitted to the Presbyterian Hospital, on September 24th, 1876. A few months before a swelling had appeared in his left side. A sinus was found five inches to the left of the ilium. On December 29th incisions

were made, to enlarge the sinus. On January 2d, 1877, the patient was seized with a chill, followed by fever and pain along the spine. On the next day subsultus tendinum and delirium were marked. He died on January 4th. There had been no tenderness over the lumbar regions. The patient had complained of formation in his arms and legs.

Autopsy.—There was necrosis of part of the crest of the ilium. There was caries of some of the lumbar vertebrae, with perforation of one of them, thereby establishing a communication with the spinal canal, causing meningitis. Beneath the dura mater there was

fibrinous effusion. The sinus which was found to the left of the crest of the ilium communicated with the carious vertebrae through the abdominal cavity. The heart and kidneys were normal, but the liver was waxy.

Dr. Satterthwaite exhibited another specimen, where the sinus was found in the groin and communicated with double psoas abscesses. The cause of death had been albuminuria.

The President mentioned a case of caries of the vertebrae presented by Dr. Gibner about a year ago, in which the cause of death had been basilar meningitis.

EDITORIAL DEPARTMENT.

PERISCOPE.

The Method of Bandaging in Ulcers of the Leg.

Mr. Wm. Prowse writes to the *British Medical Journal*. I have intimated the importance of rest in the successful treatment of ulcers in the lower extremity; and this is generally perceived and admitted by all surgeons; but, to think that rest in the recumbent posture is alone sufficient to effect the cure, is a very great error, and shows how little some of us are able to profit by the lessons of experience.

It is my opinion, and not mine only, that such an enforced resting of the entire body from all active exertion is not only wholly unnecessary, but is positively injurious to the patient and his already weakened limb. It is of the utmost importance that a moderate use of the diseased leg should be permitted while the process of healing is going on, to enable the parts to take on an entirely healthy action, which cannot possibly be the case in the bed or on the couch. We want to give the weakened structures a perfect support and a surgical and physiological rest while the patient is going about his or her usual work; and this it is which constitutes the chief difficulty. The end cannot always be attained in the same way, or by exactly the same means, for every case must be treated by itself; but, in all the commoner kinds of ulcer, and other disorders affecting the leg, efficient support may be given by adhesive straps and a roller bandage carefully applied. Too much attention cannot be bestowed on this point; for, if the application of the plaster and bandage be not done with thoughtfulness and care, and completed in every stage of the process with due exactness, the operation will be useless and the result *nil*. An imperfectly adjusted bandage must of necessity be worse than useless; it can only add to the discomfort of the patient by increasing the evils already in

existence. The slightest constriction of strap or bandage at any point above that of any part below it, must necessarily interfere with the proper course of the blood in the vessels, and thus evil would result instead of good. It will be at once perceived that skill in the art of bandaging is, above all, the one thing needful.

I must here state my unqualified disapproval of the usual mode of applying a bandage to the leg adopted by surgeons in this country, with very few, if any, exceptions. It cannot be satisfactorily performed in the ordinary way by commencing at the foot and passing upward to the knee. When thus done, every turn of the roller is likely to be made somewhat tighter than the preceding one; consequently, by the time the operator has finished, the constriction is general on all the parts above. I am aware that I shall be met by the statement that every care will have been taken to prevent this result on the part of the dresser; but it is an effect which he can scarcely avoid, however careful he may be. Bandaging, to be effective, should always be performed from above downward; it possesses many and great advantages over the old method; it can be applied more easily, more certainly, and with greater precision: it is the only way in which perfection can be attained; and is, in fact, the only true and scientific method. A bandage thus put on will keep its place for any required period without becoming materially slackened.

When plasters of any kind are deemed requisite for the support of any weak part, these should be applied in the same manner, from above downward. The plaster, cut into strips an inch wide, should be carefully adjusted around the circumference of the leg, beginning above the seat of injury, and gradually coming down the leg, each strap being made to overlap by a third of its width the preceding one.

I have laid stress on this mode of bandaging, for, by its means, a cure is so much more speedily effected; it is, in fact, next to impossi-

ble for the surgeon to succeed without it. He should always bandage the leg himself; for, if he entrust the operation to the patient himself, or other incompetent person, failure will certainly ensue.

I could cite scores of cases cured in this simple way, many of which were of long standing; in some instances, of twenty and even thirty years' duration, yielding in every case a permanent cure, and without any ulterior results of an evil character; and this latter fact cannot be too widely known in contradiction to a very common, but very erroneous, notion, that it is "dangerous to heal an old wound."

On Drainage of the Peritoneal Cavity After Ovariectomy.

In detailing three hundred additional cases of ovariectomy before the Royal Medical and Chirurgical Society, lately, Mr. T. Spencer Wells discussed the influence of drainage of the peritoneal cavity upon the success of the operation. Mr. Wells traced the history of the practice from the time when drainage by the ligature, securing the pedicle, was the rule, to its disuse when the extra-peritoneal treatment of the pedicle and its intra-peritoneal method by ligature or cautery was generally adopted. He thought the occasional use of puncture and drainage to be no reason for preferring it, as had been recommended, at the time of operation, in every case. In the three hundred cases under consideration, he had only made provision for drainage at the time of the operation in eight, and in only eleven other cases did fluid afterward escape by opening of some portion of the wound, or by vaginal puncture. He did not consider that drainage should be a general practice in ovariectomy, but should be reserved for exceptional cases where collection of blood or serum may be expected to follow the operation. Mr. Wells also described the different methods of drainage, as well as the use of simple and antiseptic injections, but the question of the more complete adoption of antiseptic precautions before, during, and after the operation, was reserved for another occasion.

Myxomatous Tumors in Infants.

At a late meeting of the Manchester (Eng.) Medical Society, Mr. Bradley showed a large myxoma which he had successfully removed from the neck of an infant. The tumor weighed seven and a half ounces, and measured four by three and a half inches. The child was seven months old, and otherwise healthy. Mr. Bradley enucleated the tumor, which was situated beneath the deep cervical fascia, on December 10th, 1876, and in three weeks the large wound had firmly healed. He attributed the extreme rarity of records of myxomatous tumors in early childhood to two causes: first, that such tumors were mistaken for other growths, such (*e. g.*) as lipomata or fibromata; and, secondly,

that the soft tumors of a connective tissue character, like myxomata, probably underwent a true evolution with the growth and changing tissues of the child, so that, when they were examined at a later date, they were no longer mucoid, but would probably be classed among the sarcomata. Mr. Bradley said that, in his opinion, tumors in early childhood should always be removed at as early a date as possible; no age being too early if they were clearly increasing in size; for, with care, the only grave objection to operation, *viz.*, hemorrhage, might be effectually prevented. This being done, recovery was highly probable, as there was no preceding and very little subsequent shock in operations in early life. Discussing the question of recurrence, Mr. Bradley thought that prognosis on this point was to be more guided by heredity than by any special anatomical character of the tumor itself; and, as there was no family history of any tumor, and as the growth was removed before the system was impregnated with the peculiar germs, he thought recurrence in this case was, on the whole, improbable.

Instance of Susceptibility to Lead Poisoning.

The following case, reported in the *British Medical Journal*, by Dr. R. B. Low, shows how easily some constitutions are poisoned by lead.

A. B., a gamekeeper, was seized with most pronounced symptoms of lead-poisoning. The colic was most intense and the suffering great. There was difficulty in tracing any exposure to the influence of lead; but at last the following particulars were elicited. A fortnight previously to his seizure he had been engaged one afternoon in making cartridges, for which purpose he had mixed some shot of various sizes in a basin, which he had stirred round a few times with his hand. The hand was blackened or "leadened" as he called it, but he washed it three times before sitting down to his evening meal. He acknowledges that the black color was not entirely removed. As persons of his class are in the habit of handling their food a good deal before eating it, we can imagine that some of the lead, at least, found its way into the mouth through the food, although part of the poison was also absorbed through the skin. With regard to the predisposition, he stated that he had been a house-painter, but that, owing to four distinct attacks of lead-colic, he had given up his business and taken service as a gamekeeper. This present attack was the worst he had ever had. The last attack previous to the present one occurred more than two years ago; during this interval he had enjoyed the best of health. There was no debauchery or drunkenness to increase the predisposition.

The interest of the case lies in the marked predisposition this individual had to lead-poisoning, which permitted so small a dose of the poison to be followed by such severe symptoms in so short a time.

REVIEWS AND BOOK NOTICES

NOTES ON CURRENT MEDICAL LITERATURE.

—The paper on "Syphilis and Chancroid," by Dr. P. H. Bailhache, to which we referred in our notice of the Report of the Surgeon-General of the United States Marine Hospital, has been reprinted.

—Dr. Landesberg, of this city, reports, in a reprint from the March number of the *Monatsblatt für Augenheilkunde*, three cases of amaurosis consequent on loss of blood. One followed hematemesis, a second metrorrhagia, a third epistaxis.

—A very excellent and timely address on "Medical Organizations and their Value," was delivered before the Alumni Association of the Jefferson Medical College, at its last meeting, by Dr. William B. Atkinson. It is to be published by the Association, and will merit very general attention. Dr. Atkinson has been identified with the history of professional organization in the United States for many years, and the opinions of no one on this subject should command more attention.

—We have also received the "City Mission Directory;" Jersey City Charity Hospital Report.

BOOK NOTICES.

Therapeutic Use of Faradaic and Galvanic Currents in the Electro-Thermal Bath, with History of Cases. By Justin Hayes, M.D. Chicago, Jansen, McClurg & Co., 1877. Cloth, pp. 112.

The author's opening remarks in the preface of this little work lead us to fear that the virtue of the electro-thermal bath is overdrawn. The writer is "confident that, as an auxiliary in the treatment of diseases of woman, it is a boon of greater value to her than has been discovered during the last fifty years." After a few pages of explanation of his method of using the bath, the writer devotes the most of the book to "History of Cases." It is not evident to our minds that Case 1 was cured of general debility by means of the baths. If the iron and quinine were left out of the treatment, and a fair trial given to the electric treatment alone, then much skepticism might be removed. Some of the other cases improved

or cured are—abdominal tumor, with symptoms of cerebral apoplexy; epithelioma of the cervix uteri; glaucoma; weak eyes; strabismus; spinal weakness; obstructive dysmenorrhœa; progressive locomotor ataxia; acute rheumatism; sciatica; gout. The chapter on Digression comes in after the case of Overwrought Brain, and just before Sterility. What shadow of bearing this digression has upon electro-thermal baths it is hard to conceive. It probably is the result of an overworked brain, and is most assuredly sterile in application. The case of sterility was due to a contracted cervix uteri. During the treatment eighteen tents were introduced, and yet the cure is claimed to be due to the electro-thermal bath.

We need observations in electro-therapeutics, but it seems to be very unsatisfactory to expect much advance in this line by a series of cases in which a very unfair and limited trial is given to the virtue of electricity. In the majority of cases the usual plan of treatment is carried on in connection with the electric baths.

Report of the First Congress of the International Otological Society, New York, September, 1876. D. Appleton & Co., New York.

The International Otological Congress was organized in 1876, through the exertions of the members of the American Otological Society. On the 15th of September the meeting was called to order and a constitution and by-laws adopted, after which, the papers forming the body of the very respectable volume before us were read and briefly discussed. On motion, the Congress adjourned to meet in 1880, at Heidelberg, Germany.

The report, although containing but 159 pages, embodies a number of interesting and valuable contributions to the literature of the ear. Not the least important features in the report are the papers by Drs. Burnett and Blake, on the advance made in otology during the years 1875 and '76. These two articles include nearly one-half the volume, and are replete with valuable matter.

The remaining fourteen papers are made up principally of clinical cases of greater or less importance, with remarks of the respective writers thereon.

It seems unfortunate that the society should not have given itself more time for discussion of papers, as the value of the reports would have been thereby greatly enhanced.

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D. G. BRINTON, M. D., EDITOR.

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115 South Seventh Street,
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IS SICKNESS A PUNISHMENT FOR SIN?

The earliest treatise on domestic medicine written in this country, was by the very Reverend and learned COTTON MATHER, of witch-burning fame. It is entitled "The Angel of Bethesda," and is altogether in a spirit characteristic of the bigoted old Puritan. The cardinal premise on which he starts out is, "Sickness is flagellum Dei pro peccatis mundi," "for the sins of the soul there come sufferings on the body." His logical deduction, therefore, is, "under sickness we should be more concerned for being saved from sin than from sickness." In an attack of gout he recommends the patient "to fall into serious and awful meditation on y^e pain of them on whom an Allpowerful God will make known y^e power of His anger;" and to persons suffering from urinary diseases, he commends the comforting reflection that the pains they suffer "are much less than they deserve."

Taken broadly, this grim doctrine of disease has so lost its hold on reason, that we smile at it. Giant Puritan has gone to join those other two giants whom John Bunyan tells of, who can only impotently shake their fists at the passer by on the road to the City of Truth. Yet in certain half unexplored districts of thought, the victory of reason and humanity is not yet complete. A large body of the public, and (shame to say) of the profession, are still desirous to encourage venereal disease as a rod in *terrorem* for the profligate, as a *flagellum Dei pro peccatis*. The Nineteenth century witnessed the publication of a letter from a Pope condemning a certain invention for protection from syphilis, which the French have the credit of devising, on the ground that it interferes with Providence punishing miscellaneous intercourse; and not to be outdone in fanatical folly, a Protestant association, only three years ago, obtained an act confiscating all those entered in the New York Custom House, on substantially the same assertion.

The same argument is advanced against the passing of laws to diminish venereal diseases by the registration and inspection of seamen, prostitutes, criminals, etc. Such acts, it is first claimed, will be inoperative; but this is not at all the source of the opposition; could they be so framed as to be successful in the highest degree, their opponents would be tenfold more bitter. The real objection urged is that were they to render illicit intercourse safe from the risk of infection, profligacy would be much increased; that infection is its proper deterrent and punishment, and should not be diminished; rather increased.

Now, there are several very good arguments against this position. In the first place, no one imagines that venereal disease will ever be "stamped out." It never can be. Therefore there can never be complete immunity from danger; and it is an unquestionable fact that the terror of a very rare disease is far greater than that of a familiar one. Hydrophobia is extremely

rare, sometimes a whole year passing, in this city of nearly a million people, without a case; while consumption kills, with almost equal certainty, its fifty to seventy-five persons a week. Yet the dread and horror of hydrophobia is incomparably greater than that of consumption. Dogs are killed and muzzled, pounds erected, gangs of men parade the streets with nets to capture stray canines, ordinances are passed, all in obedience to this blind terror; while never, in our memory, has any public step been taken to diminish the prevalence of phthisis, though the best authorities pronounce it a preventable disease.

Another argument is that the increase of venereal diseases does *not* diminish profligacy. It increases it. People grow indifferent to these diseases. They lose their terrors. The fact is that, in the individual himself, they are not so bad as they are painted. He finds this out, and as for his progeny, he thinks little of the consequences to them.

But we can go a step further. A writer has well said that those who think it wrong to diminish the risk, lest profligacy should be increased, may be fairly asked if they would think it right to introduce the disease when it does not exist in order to check profligacy; and as doubtless they would not, they should be asked to explain why it is wrong to try to remove or diminish an evil they would certainly not increase, on the chance of increasing self-restraint by its existence. Surely, if it be wrong to diminish the frequency and severity of disease arising from vice, it must be wrong to diminish the injury and suffering it produces; and all who, by their own fault, contract it, ought to be left unaided to endure the natural punishment of their sinful indulgence. This is the only logical conclusion of what it is polite to call the *argument*.

But the case does not stop here: the immediate are not the only, sometimes not the most severe, sufferers from the disease. Wholly innocent wives and children may, and often do, suffer

also; and, perhaps, the severest punishment that could be inflicted upon one who has brought this dire disaster upon his wife and child would be dooming them to suffer unaided. Would it be right to inflict this punishment upon him as a warning to others to avoid vice? If it be not right to diminish danger of contracting disease lest vice should be discouraged, can it be right to diminish even this tremendous punishment, the indirect but not remote consequence of vice? The answer is very easy. It is our duty to guard against danger, and to relieve suffering, however caused; but it is not our duty to punish vice, if it be not also crime—*i.e.*, what is directly injurious or dangerous to others; nor can we innocently inflict greater suffering even on the criminal than is needed for the protection of society.

We speak of this subject at this time, in view of the approaching meeting of the American Medical Association. At its last meeting in this city, a committee, appointed at Louisville, should have reported to the Section of State Medicine on the subject of legislation against the extension of venereal disease. Through inexcusable neglect, or a cowardly shirking of duty, this report was not made. In either case, it is to be hoped men will be appointed this year intelligent enough to give the subject an unbiased examination, and brave enough to report the result of their studies.

THE PHARMACOPŒIA QUESTION.

A lively discussion has been going on between Dr. E. R. Squibb, the editor of the *Medical Record*, and others, on the one side, and Dr. H. C. Wood, editor of the *Philadelphia Medical Times*, and his friends, on the other. The bone of contention is the United States Pharmacopœia. The party of the first part say it should be merged into the United States Dispensatory, and owned and issued by the American Medical Association, with the assistance of two members of the American Pharmaceutical Association, and one appointed each from the Surgeon-

General of the Army, and the chief medical officer of the Navy. The party of the second part represent the conservative element, who want the books to appear separately, as heretofore, the *Pharmacopœia* to be prepared by the Convention for the purpose, appointed to meet in 1880, the Dispensatory by those interested in the copyright money it will yield.

That some change is called for is only too evident to any one who has examined the meagre skeleton of a book issued as the last revision of the *Pharmacopœia*. Even Mr. Alfred B. Taylor, an ardent partisan of Dr. Wood's view, is obliged to confess that its make-up was, as he euphemistically puts it, "a conservative retardation of the car of progress."

It is also called for by the fact that the Dispensatory in its present latest edition is so far behind the times, contains so much that is superfluous, and lacks so much that is required, that this compilation, which should be of great use to both apothecary and physician, is of little to either.

But especially is it objectionable to have the two separate. They could, and were it not for purely mercantile reasons they would, form but one volume, which, by frequent re-issue, would always be satisfactory as a book of reference. The practical difficulty of finding men able and willing to give their time to the labor of these revisions is at once and completely answered by the statement (the correctness of which we feel confident about) that the proceeds of the copyright would adequately repay them.

It is an unfortunate weakness on the part of Dr. Squibb's principal opposer, that the side he espouses so warmly is so entirely in accord with his prospective pecuniary interests—interests which he has never been accused of neglecting—as this fact cannot but detract, in the minds of many, from the force of his arguments.

The question is to be brought before the next meeting of the American Medical Association. That Dr. Squibb's plan, as described, should be adopted in full, might not be judicious. It is

doubtful if it would. But that the two books should be kept separate, merely to make money, is an evil that we hope, in some way, to see wiped out.

NOTES AND COMMENTS.

Innuitrition.

A contemporary thus speaks of this malady:—The law of longevity is an actively operative law, as is proven by the observation of Dr. E. Jervis in the Fifth Annual Report of the Massachusetts Board of Health, but its activity will be checked in the early future, particularly among us, by the growing results of the malady of innuitrition, if the present circumstances of things continue long in operation. The laws of heredity inform us that, generally speaking, "like begets like," so that the highest standards of individual health, strength and mental aptitude, in one generation, are apt to beget corresponding ones in the following. Antenatal innuitrition is quite as common a cause of post-natal disease and death as is the impoverishment of the body through want, neglect, or ignorance, after birth. This danger is a new one for us Americans, for abundance, up to this time, seems to have been our birthright, but the reaction from the severe financial depression which has swept over our country is so tardy that evils formerly confined to the unrelievable poverty are now in existence in the States. During the last three years it is estimated that fifty per cent. of the medium class have suffered bad material changes in their worldly circumstances, some twenty-five per cent. being seriously involved in money difficulties which may never be overcome, and ten per cent. of these hopelessly deprived of anything which may preserve them from a life of "hand to mouth." Physically and materially, poor parents, besides running all the dangers of the diseases to which a badly nourished body exposes them, will probably endow their offspring with the same and increased unfortunate predispositions. But the trouble does not reside only in the poverty-stricken home, for improper, badly prepared food, irregularly taken and badly digested, may also produce the same effects in the houses of the wealthy. Tuberculosis, nervous disorders, uterine irregularities, cachexias, pneumonitis, etc., are increasing, but though the lack of food cannot justly be considered their

sole cause, yet regarding it as a positive condition, paving the way for more specific influences, it must be held as an important one, equal to, if not greater than, that of any other.

Oil of Turpentine in Sciatica.

In the *Edinburgh Medical Journal*, for March, there is an interesting paper by W. A. Man Jamieson, M.B., M.R.C.P.E., on "The Treatment of Sciatica by Oil of Turpentine." He gives it in the morning, before breakfast, in the following formula:—

R.	Ol. terebinth,	3ij
	Ol. ricin.,	3iv
	Tinct. card. co.,	3i
	Mucilag. et aq. ad.,	3ij.

This draught is given every third or fourth morning, if necessary, but one dose is generally enough. The beneficial effects are supposed to be due to some peculiar action on the intestinal mucous membrane, as pointed out several years ago, in a paper by the late Dr. Warburton Begbie, "On the Actions and Uses of Turpentine."

Increase of Aural Affections.

In a paper read before the last meeting of the British Medical Association, attention was drawn to the occurrence among a certain class of patients of marked increase in deafness, and in the gravity of the symptoms of ear disease, due to pregnancy, parturition, etc. The form of aural mischief most aggravated by these processes was chronic, non-suppurative inflammation of the tympanic cavities. After each confinement, the patients were much worse, the hearing diminished, and the tinnitus aurium was more marked. The deterioration was very persistent, and extremely obstinate; and ultimately, after repeated confinements, the hearing was almost entirely abolished. Young, strong, and apparently healthy females were the chief sufferers; often they had never had any ailment in their lives. The aural deterioration began with pregnancy, and increased onward to parturition, after which the effect remained: a result by no means comparable with the temporary aggravation seen during other constitutional affections, fevers, etc. Other forms of ear disease were not affected in the same permanent manner as chronic non-suppurative inflammation of the tympanic cavities. No history of any syphilitic taint could be detected in these cases. Whether the effect on the aural condition pro-

duced by child-bearing was only part of a general diminution of nerve power, and in no way due to the special condition of pregnancy, etc., apart from its constitutional deterioration, was matter for further observation, though the facts were in favor of its being caused by the state peculiar to pregnancy. Early attention to treatment was most important to the patients.

The Treatment of Psoriasis.

One use, says the *Practitioner*, appears, at last, to have been found for phosphorus, which, if confirmed by further experience, will make it a most useful medicine. Dr. Broadbent mentioned at the Clinical Society a case of psoriasis, in which, after other remedies had failed, he gave phosphorus, and in a week the disease, obstinate before, was cured. As Sir W. Jenner pithily observed, cases of psoriasis are plentiful, and phosphorus capsules to be had in abundance, and there should be no difficulty in inquiring into the action and use of phosphorus in this obstinate and oftentimes extremely troublesome disease.

Nicotinism.

The *London Record* says, M. Mauriac, Surgeon of the Hospital du Midi, has just added another to the special diseases of smokers. He has described, under the title of *plaque des fumeurs*, a morbid change of the mucous membrane of the tongue and mouth—a special psoriasis. This lesion may degenerate into epithelioma; and, according to M. Mauriac, cancer of the lips and tongue has often no other origin than this. Both are common among men, and very rare, as might be supposed, among women.

Rapid Malignant Disease.

A correspondent sends us an account of a case of rapid malignant disease, occurring in an elderly man in Huntingdon, Ind. He appeared in perfect health up to eight days before his death. A post-mortem revealed cancerous infiltration of the lung, ulceration of the stomach, and the jejunum gangrenous. There was also found a soft, irregular-shaped, nodulated tumor, which really filled the right iliac fossa, containing all the characteristics of being malignant. In the pancreas, and along the hepatic ducts and vessels, were also found malignant tumors of small sizes, producing

disorganizations and extensive adhesions all along the posterior portion of the abdominal cavity.

Such a case is of exceeding rarity.

CORRESPONDENCE.

A Case of Opium Poisoning Recovered by Hypodermic Injections of Aqua Ammonia.

ED. MED. AND SURG. REPORTER:—

About three P. M., on Sunday, April 8th, 1877, I received a message to come immediately to see John H., aged thirty years. When I arrived I found him suffering with an abscess of the left parotid gland, and in a profound stupor. I at once suspected opium poisoning. Upon inquiry, I found that on the night before (April 7th) he had obtained three sulph. morphia powders from a drug store, one of which he took at ten that evening, which eased his pain somewhat during the night. On Sunday morning, at ten, he took another one, which gave him no relief until two P. M., when he suddenly collapsed. I found him at three P. M. in the following condition: Profoundly asleep; could not be aroused; pupils decidedly contracted; pulse feeble and irregular; respiration stertorous and feeble, so much so that he breathed but four times a minute; skin about face, neck, chest, arms, and hands had a cyanotic appearance; finger nails dark; the capillary circulation had ceased; body bathed with cold perspiration.

Treatment.—From the condition and appearance of the patient I concluded that the antidotes generally recommended would not reach the case in time to save life, so I determined to try a stimulant, and selected aqua ammonia for the trial. Gave three drops of the ammonia, hypodermically, diluted with three drops of water. I took my watch in one hand and the pulse in the other. I noticed the pulse and respiration as follows: In three minutes after this injection I thought I noticed a slight improvement in his respiration. I then gave another injection of three drops, undiluted. From the fourth to the fifth minute respiration more full, and increased to six per minute. Pulse increasing. From fifth to sixth minute respiration stronger, and increased to seven. Pulse improving. From sixth to seventh minute respiration increased to eight, and here I first noticed the return of the capillary circulation. Pulse improving. From the seventh to eighth minute respiration increased to nine, deep and full, and capillary circulation had returned; discoloration of skin disappeared. At this time I called him by name; he at once responded, and recognized those around him.

After he became conscious I ceased my observation. The patient remained drowsy for several hours afterward, but could be easily aroused. At 7 P. M. the effects of the morphia had entirely passed off. The remaining mor-

phia powder I had weighed; it contained 1½ grains: judging from this, the patient had taken 2½ grains. All this morphia had but little effect upon his system, until four hours after the last powder taken, when it suddenly exploded in the system, causing its poisonous effects.

The aqua ammonia produced considerable inflammation of the skin, but passed off in forty-eight hours, leaving nothing but an ecchymosis where it was injected.

Harrisburg Pa.,

E. H. COOVER, M.D.

Vitality of Females.

ED. MED. AND SURG. REPORTER:—

The case of a lady patient who recently came under my notice has caused considerable study, as well as some calculation, which, at first sight, seems rather startling.

Mrs. P. was married at the age of seventeen years. At the age of thirty-six she was the mother of nine children, all living, except one. She had one child each year for the last five years. Four, only, of these children were nursed by the mother. These were nursed each an average of a year and a half. The other four were raised on the bottle, or by hand, on cow's milk.

There is nothing strange in all this. Certainly not, but let us calculate a little.

The mother who supplies all the milk a child will take may be surprised to learn that a quart each twenty-four hours, one day with another, will scarcely suffice. A year and a half will number 547 days. Making some allowance, this mother secreted at least five hundred quarts of milk for each child she nursed. But she nursed four of her nine children, requiring, in the aggregate, 2000 quarts of milk, equivalent to 500 gallons, or 12½ barrels of 40 gallons each.

Supposing each gallon of milk to weigh 8 lbs., the grand total is 20,000 lbs.—just 2 tons; at least one hundred and sixty-six times the weight of the mother who secreted the milk. Being small in stature, her average weight is 120 pounds. Besides all this, the family is in very moderate circumstances, requiring constant toil and mental anxiety, in which the mother shared liberally.

If such are the duties of maternity, can there be any wonder that females avoid, as much as possible, the responsibility of rearing families.

I merely state this case to show to what extremes some people may push the drudgery of life, and still live to suffer the consequences of their indiscretion.

Karns City, Pa.

A. D. BINKERD, M.D.

—The second annual meeting of the American Gynecological Society will be held in Boston on May 30th. The annual address will be read by the President, Dr. Fordyce Barker, of New York.

NEWS AND MISCELLANY.

An Anglo-American Sanitarium in Rome.

It is proposed that an English Home, or Sanitarium, shall be founded in Rome, for the numerous visitors and residents of the Anglo-Saxon race, and that it shall be opened in October next. It is to be completely non-sectarian. It will be open to all ministers of religion and all medical men. The payments will be fixed on the most moderate scale. It will be especially devoted to the benefit of the English and Americans, but will be open to invalids of other countries, on the recommendation of the Committee. A private hospital will form part of the work, entirely separated from the Home itself, where severe cases of accident and illness will be received and nursed in private rooms, at special fixed rates of payment. Trained English nurses will be attached to the Home, and take charge of the cases under medical supervision. Such Homes exist in Mentone, Florence, and Cairo. The proposed institution has the sanction and support of his Excellency, Sir Augustus Paget, her Britannic Majesty's Ambassador, and the Hon. G. P. Marsh, United States Minister. It is necessary to raise a considerable sum to hire a suitable building, for which an eligible opportunity now offers to furnish it, but it is fully expected that the institution will ultimately be self-supporting, and the nucleus of extended hospital work.

The Old Hotel-Dieu.

The authorities in charge of this most ancient hospital of Paris have received notice that they must surrender the building not later than the 13th of September, as the municipality intend to raze the building before the Exhibition of 1878, and to plant the ground with trees. The new Hôtel-Dieu, one of the ugliest and worst devised hospitals in Europe, had cost the monstrous sum of \$10,000 per bed. It is thus, therefore, by far the most extravagant and wasteful hospital in Europe, and of the new hospitals probably the worst. It is one of the legacies of the Empire, under which the administration of the Paris hospitals accomplished prodigies of jobbing and mal-administration.

The Progress of Diphtheria.

The vital statistics of Providence, Rhode Island, are probably more carefully reported than those of any other city in the Union. The following history of diphtheria there has, for that reason, an especial interest. It is taken from the last monthly report of the city registrar, Dr. Snow:—

The first deaths reported from diphtheria in Providence, for at least more than half a century, were in August, 1858. In that year there were 5 deaths from this disease, and there have been more or less deaths from it each year since, the smallest number in any year being 5

each, in 1858, 1867, and 1868, and the largest number previous to 1876, being 42 in 1863. The whole number of deaths, previous to 1876, was 334. In the year 1876 there were 26 deaths previous to the first of September, and 85 deaths in the four months, September to December inclusive. In the first four months of the present year there have been 65 deaths, making a total of 510 deaths from diphtheria in Providence, from August, 1858, to April, 1877, inclusive.

Obituary Notes.

—Henri Ferdinand Dolbeau, Professor of Surgical Pathology in the Paris Faculty, died suddenly at Paris, on March 10th, aged 46. Although cut off in the prime of life, M. Dolbeau had already achieved distinguished reputation as a practical surgeon, and had made numerous contributions to medical literature, the most important of which is his "Treatise on Perineal Lithotrity."

—Dr. J. B. Phillips, State Commissioner of Statistics, for Minnesota, died in April, of heart disease. He was born in Chester County, Pa., of Quaker descent, in 1822, studied medicine at Pennsylvania University, and spent some years in Europe, in study at Basle. In 1854 he was arrested and imprisoned on suspicion of being Mazzini, an affair which was the subject of considerable diplomatic correspondence.

—Dr. Ezra Read, a leading physician of Terre Haute, Indiana, died May 10th, aged 66. He served in the United States Navy, and also three years in the Federal Army, during the late war.

Personal.

—Dr. D. R. Brower, late superintendent Eastern Lunatic Asylum of Va., has been appointed attending physician for mental and nervous diseases at St. Joseph's Hospital; this position was occupied by Dr. Walter Hay, and was made vacant by his departure from the city.

—Dr. Reese, Professor of Toxicology and Medical Jurisprudence in the University of Pennsylvania, and Dr. Howell, Professor of Mineralogy and Geology in the same institution, and Professor of Chemistry in the Philadelphia Dental College, are both candidates for the vacant chair of Chemistry in the University of Pennsylvania. Both are worthy and talented gentlemen.

—Dr. J. J. Caldwell of Baltimore, has been appointed chairman of a committee on Anæsthetics, to report to the Dental Association of Maryland, on the second Tuesday in August. The profession are invited, and full particulars will be furnished by Dr. C. on application.

—Dr. R. M. Bateman, desires correspondents to address him, in future, at Red Bank, N. J.

—Dr. Comegys Paul has been elected resident physician of the Eastern Penitentiary.

The Russian Female Medical School.

This, at the present time, comprises for the five years 430 students, of whom seventy-three are Israelites, nineteen Polish Catholics, eleven Polish Protestants, and the rest Orthodox. In order to belong to the school, women must attend the regular course of lectures, and undergo special examinations. All the Governments of the empire furnish students for this school. They belong to the middle classes, and are generally from twenty to twenty-five years of age, very few having passed their thirtieth year. Among them are sixty-eight married women.

\$1000 Reward.

We would ask, with emphasis, the attention of physicians in attendance on public institutions to the advertisement headed as above in our columns. If they succeed in discovering the facts desired, not only will they be rewarded for their trouble, but will relieve the anxieties and agonies of a most worthy and suffering family.

Items.

—The Managers of the Women's Christian Temperance Union, of Philadelphia, have established in this city a Home for the reception of those who, on account of inability to refrain from intemperance, are willing to place themselves under restraint. This home is exclusively for women, and is under the charge of Dr. A. V. Scott, the female resident physician. Application for admission may be made at the Home, No. 220 North Thirteenth street, Philadelphia.

—The California State Medical Society, last month, almost unanimously declared that the practice of making annual contracts with individuals or societies, for medical attendance, is not only derogatory to the dignity of the profession, but a violation of the Code of Medical Ethics, adopted by the American Medical Association. The society decided to strike from the roll of membership the name of any physician who shall hereafter make or renew a contract for annual medical attendance.

—An exchange says that Dr. Spaulding has brought before the Detroit Academy of Medicine a case in which, from a boy fourteen years old, he removed both testicles; the boy was rapidly becoming an imbecile, from masturbation. Before resorting to so desperate a measure, Dr. Spaulding consulted several eminent medical men, who deemed the operation justifiable. The result is satisfactory; the youth is acquiring good business habits, and earns his own living.

THE RULING PASSION.—Farmer McGrab.—Doother, a'll gie ye a hunner pown if ye'll keep me livin' anither twalmonth. Amiable M. D.—I'm afraid, Mr. McGrab, I couldn't do it for that. I might try it for five hundred. Farmer McGrab (emphatically).—I'd rather dee.

QUERIES AND REPLIES.

Pityriasis, or Liver Spot.

MR. EDITOR:—In answer to J. A. P., I would advise him to prepare the following simple, but most effectual remedy, for the above disease, viz.:

R. Florum sulphuris,	ounce iv
Olei anisi,	drachm j
Aque bullientis,	O ij.

Sig.—Cork and shake three or four times a day for three days, and then let the patient wash the affected parts morning and evening till the spots disappear, and then only once a day for one month longer.

If the bowels are constipated, give the following alterative laxative pill at bedtime:—

R. Mass. pilul. hydrargyri,	gr. ij
Extr. colocynth comp.,	gr. ij
Podophyllin,	gr. ½
Extr. belladonnæ,	
Ext. nuc. vomice,	aa gr. ½.

Sig.—At bedtime.

N. B.—The sulphur must be always left in the bottle, and a few minutes before each washing well shaken. Respectfully,
J. FIERNAT, M. D.
Evansville, Ind.

Dr. H. F. B., of Ky., asks for suggestions for the treatment of chronic nephritis. There are no dropsical symptoms in the case.

"I." says:—I have a patient, seventy-seven years of age, feeble constitution, affected with ophthalmia, that resists all and every treatment yet brought to bear. The symptoms are, burning and pain upon pressure on the balls. Rubbing affords relief so that the patient can scarcely desist after commencing. A mere inspection affords but little clue to a diagnosis. Some little thickening of edge of lids and enlargement of vessels, but elsewhere the membrane is scarcely reddened; the vessels not much enlarged, though the case is of a year's standing; sometimes a little better, but the improvement always of short duration. I have no ophthalmoscope. A suggestion desired.

R. M. B., of N. J.—Not at present.

Dr. A. B. S., of Cal.—An impartial and brief letter will be acceptable.

MARRIAGES.

DAVIS—LEE.—In this city, on the 25th of April, at the residence of the bride's mother, by the Rev. Theodore Heilig, Dr. A. H. Davis and Mary Weston Lee.

DRAKE—CARPENTER.—On the 8th instant, by Rev. Robert C. Matlack, Frank N. Drake, M. D., of Nevada, and Miss Mary S. Carpenter, of Philadelphia.

MORTON—NORRIS.—At Mount Pleasant, Miss. March 18th, 1877, by Rev. Thomas Cameron, John W. Morton, M. D., of Waterford, Miss., and Miss Jennie H. Norris, only daughter of Major Benjamin Norris.

DEATHS.

BELDEN.—In New York, on Sunday, May 6th, Benjamin Belden, M. D., in the eightieth year of his age.

DEFOREST.—On the 18th ultimo, of pneumonia, Mary Abernethy, wife of Wm. B. DeForest, M. D., of New-Haven, Conn.

HORNBECK.—On Monday, the 7th instant, of dysentery, Westbrook, infant son of Dr. M. E. Hornbeck, of Catasauqua, Pa.